

OBJECT RETRIEVAL AND STORAGE DEVICE

Percy A. Dickens

TECHNICAL FIELD

5 This invention relates generally to a device for gathering a number of objects on the ground, such as fallen pine cones or magnolia pods, from a standing position without damaging the objects.

BACKGROUND OF THE INVENTION

10 The retrieval or removal of a number of objects scattered on the ground, such as pine cones or magnolia pods, is needed for several reasons. The presence of such objects on a lawn, walkway or driveway, or in a garden, can be a nuisance or a hazard. In addition, several types of these objects, particularly pine cones, also are collected for decorative or similar purposes. Damaging the objects during retrieval may exacerbate the nuisance or 15 hazard caused by the presence of the objects, and potentially reduces the value of such objects collected for decorative purposes. Retrieving or removing such objects without damage to the item can be done individually by hand, but such work can be physically strenuous and difficult, especially for those with physical infirmities.

Devices for picking up objects on the ground while the operator is standing upright 20 are known in various forms. Typical of such devices are those disclosed in U.S. Pat. Nos. 3,157,422; 3,333,881; 3,601,966; 4,143,899; and 4,615,555. Several such devices with hingeably-attached jaw or blades at the end of a handle are suitable for picking up single items, or items that are closely bunched or grouped together, but are not suitable for quick retrieval of a large number of widely scattered objects such as pine cones. These devices also 25 are usually heavy, expensive, and difficult to operate.

Other devices have one or more prongs mounted at the end of a handle to pierce the object to be retrieved. Typical of such devices are those disclosed in U.S. Pat. Nos. 2,520,764; 2,552,467; and 2,804,336. This results in undesirable damage to the object being retrieved, and a limited number of objects can be handled at a time. In addition, the prongs on such devices often have sharp, pointed ends, which can be hazardous.

One variation of the multiple-prong device has prongs adapted to surround the object to be retrieved but not pierce it. Typical of such a device is that disclosed in U.S. Pat. No. 5,490,701. While this prevents some damage to the pine cone or similar objects, such devices require precise hand-eye coordination and store a limited number of such objects. In addition, the prongs on the device can be hazardous.

Thus, what is needed is an improved device for retrieving and temporarily storing a large number of fallen objects such as pine cones or magnolia pods quickly from a standing position without excessive damage to the objects.

15

SUMMARY OF THE INVENTION

Accordingly, an object of the invention is to produce a improved device enabling a person in a standing position to retrieve and temporarily store a large number of scattered objects such as pine cones or magnolia pods from the ground with minimal damage to the objects.

The present invention is directed to a retrieving device having an elongated handle at the lower end of which is a basket formed by a series of substantially parallel loops attached to a base mount affixed to the handle. The spacing between the loops, which are substantially rigid, is such as to allow the objects being retrieved to be held securely within

the basket, but the loops are flexible enough to allow the objects to be squeezed between the loops into the basket with minimal damage to the objects.

Still other advantages of various embodiments will become apparent to those skilled in this art from the following description wherein there is shown and described exemplary 5 embodiments of this invention simply for the purposes of illustration. As will be realized, the invention is capable of other different aspects and embodiments without departing from the scope of the invention. Accordingly, the advantages, drawings, and descriptions are illustrative in nature and not restrictive in nature.

10 **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 shows a side view of one embodiment of a device in accordance with the invention.

Figure 2 shows an end view of the device of Figure 1.

Figure 3 shows an enlarged perspective view of a portion of the device of Figure 1.

15 Figure 4 shows an end view of the device of Figure 1 with a concave bottom face.

Figure 5 shows an end view of the device of Figure 1 with an angled bottom face.

DESCRIPTION OF EXEMPLARY EMBODIMENTS

As shown in Figures 1 and 2, a first embodiment of a device according to this 20 invention includes an elongated handle 1 of convenient length, allowing a user to comfortably hold one end of the handle and contact objects on the ground with the opposite end of the device. The lower end of the handle is affixed to a base mount 2 by welding, bolting, insertion into a threaded hole, or other similar means. The handle 1 may alternatively be affixed by integral molding with the base mount 2. The base mount 2 extends transversely to 25 the handle, and may, for example, be in the form of a rectangle or square. A series of

substantially parallel loops **3** are affixed to the base mount **2** to form a basket **4**. The loops **3** can be bent in a variety of shapes, such as, for example, two bends **11** of roughly ninety-degrees each so each loop forms three sides of a rectangle or square.

The loops **3** may be fashioned from a single rod or wire, or from a plurality of rods
5 affixed at their ends **10** to the base mount **2**. The loops may be integrally molded with the base mount **2**, or affixed by welding, bolting, clamping, screwing, or similar means. The base mount **2** can consist of a single pieces, such as a single metal plate or block of wood, or can comprise multiple parts, such as two rectangular bars or pieces affixed to each other by one or more cross-pieces, bars, rods, or plates. The latter configuration may reduce the
10 weight of the device, and also allow the user to more easily view the contents of the basket **4**.

The loops **3** forming the basket **4** can be reduced in size at either end of the basket **4** to close the basket **4**, or one or both ends can be left open. Ends of the basket **4** that are left open in this fashion can be closed-off with end-pieces **5**. Such end-pieces **5** may be fashioned from a single curved or bent rod, as shown in Figure 2, or from a grid or mesh structure, a
15 plate, or some combination thereof. One or both, if two are present, of such end-pieces **5** may also be hingeably-attached to the basket **4** or the base mount **2** to allow for the easy removal of objects collected by the device, with a latch or similar retaining device to keep the end-piece **5** closed during operation of the invention.

The operator of the invention holds the elongated handle **1** and places the bottom face
20 **6** of the basket **4** over the pine cone, magnolia pod, or other object to be retrieved. A downward pressure on the handle causes the object to be squeezed through the loops **3** forming the bottom face **6** of the basket **4**. The loops **3** to either side of the pine cone or object deflect slightly to allow the pine cone or object to pass into the interior of the basket **4**, then return to their original position.

In one exemplary embodiment, the loops 3 forming the basket 4 are affixed to the base mount 2 with bolts, screws, clamps, or similar means. The spacing of one or more of the loops 3 can then be increased or decreased by adjusting the points at which the loops 3 are attached to the base mount 2.

5 In another exemplary embodiment, the bottom face 6 of the basket 4 can be modified in a number of configurations to assist in keeping the pine cones or objects being collected under the bottom face 6 when pressure is applied. As shown in Figures 2 and 3, the bottom face 6 can be flat. As shown in Figure 4, one or more of the loops 3 forming the basket 6 can also be curved along the bottom face 6 to form a concave face in whole or in part.

10 Similarly, one or more of the loops 3 can also be bent upwards along the bottom face 6 at an angle, as shown in Figure 5.

Accordingly, the spacing of the loops can be adjusted depending on the size of the objects to be collected. The size of the loops and the location and angle of bends or angles in the loops can also be modified to suit the objects being collected and the physical 15 characteristics of the user.

Thus, it should be understood that the embodiments and examples have been chosen and described in order to best illustrate the principals of the invention and its practical applications to thereby enable one of ordinary skill in the art to best utilize the invention in various embodiments and with various modifications as are suited for the particular uses 20 contemplated. Even though specific embodiments of this invention have been described, they are not to be taken as exhaustive. There are several variations that will be apparent to those skilled in the art. Accordingly, it is intended that the scope of the invention be defined by the claims appended hereto.